In two cases loose pieces of bone were removed; in one a thorn, supposed before the operation to be a spicula of bone, and twice bullets were extracted. One of these had been thirteen years in the joint. In two cases "nothing could be found;" but, in one of these, adhesions on the back of the patella were forcibly broken up. There was but one death from the 105 operations, and, as that was due to "phlegmonous erysipelas," the asepsis of the operation is at least doubtful. In two cases suppuration demanded amputation of the thigh, after which the patient recovered.

One of these cases was after removal of a "fibro-fatty body" by Dr. R. F. Neil, where there was "severe manipulation" of the joint; the other was at St. Thomas's Hospital, and no particulars are given.

Stiffness of the affected joint is reported in three cases. In one of these cases 400 loose cartilages were removed, and in the other two, 25 and 4 respectively. In four other cases slight impairment of motion is reported. In one of these there were adhesions and stiffness before operation, but no loose body.

The second was one where a bony tumor was also sawed off. In the third, recovery was complicated by a secondary hemorrhage, rheumatic fever, and pericarditis. Of the fourth, we have no particulars. In all other cases prompt recovery, with good motion of the affected joint, resulted. In place of Larry's death-rate of 21.3 per cent. and Barwell's of 8.3 per cent., we have here a death-rate of less than 1 per cent. (0.9 per cent.), with great doubt whether the single death should be recognized as the result of an antiseptic operation; while in but ten cases (9.5 per cent) was there failure to produce a perfect joint with good motion. With proper care before, during, and after this operation, there seems to be then but a remote chance of loss of limb, and almost no risk to life, and although in complicated cases there is possibility of more or less resulting stiffness, it is to be remembered that a joint containing loose cartilage is a constant source of annoyance, and that the possessor is always more or less crippled by it.

OTOLOGY.

UNDER THE CHARGE OF

CHARLES H. BURNETT, M.D.,

AURAL SURGEON, PRESBYTERIAN HOSPITAL, ETC., PHILADELPHIA.

CYSTS IN THE AURICLE.

HARTMANN, of Berlin, holds that many cases of asserted hematoma auris are not due to an effusion of blood, but to the formation of simple cysts in the auricle (*Archives of Otol.*, 1888; *Annales des Maladies de l'Oreille*, March, 1889). He reports three new cases. The subjects were in good health, of middle age, without any tendency to psychic derangement, excepting in one case. Heretofore the subjects have been men; in this last series one case was that of a woman. There was no traumatic origin in any instance. These tumefactions, which were incised about two weeks after their formation, discharged a perfectly clear liquid, sometimes yellowish, but never bloody. In all cases the cartilage was denuded. Healing occurred rapidly where a rigorous antiseptic dressing was maintained. Hartmann's method consists in dressing the wound with iodoform gauze. He endeavored to discover microörganisms in the contents of these cysts, but the examinations as well as the cultures on gelatine were negative.

ACUTE MYRINGITIS IN CHILDREN.

EITELBERG has reported a case of acute myringitis in a child four years old (*Archiv für Kinderheilkunde*, Bd. x.; *Annales des Maladies de l'Oreille*, March, 1889). This disease, a rare one in little children, appeared in a little girl, who suddenly became dull, feverish, and lost her appetite. The right membrana tympani was found uniformly, intensely red and swollen, though the malleus could be distinguished. Politzer's inflation giving only temporay relief, the membrana was incised on the supposition that pus was in the drum-cavity. No pus, however, was found; in a few hours the pain in the ear ceased, and in four days the membrana was nearly normal in appearance.

PERSISTENCE OF HEARING AFTER DESTRUCTION OF THE STAPES.

The extirpation of the stirrup in this instance was unintentional (BERTHOLD, of Königsberg, *Arch. of Otol.*, No. 3, 1888; *Annales des Maladies de l'Oreille*, March, 1889). It occurred in a case of otorrhœa followed by a perforation in the membrana and an extensive adhesion of the tympanic membrane. In order to diminish the subjective noises in the head, and the vertigo, the author endeavored to detach the adhesions, and in doing so was surprised to find that the stirrup came out entire on his hook. There was no flow of the labyrinth-fluid, but violent vertigo ensued for two or three days. Berthold concluded that the inflammation had led to dislocation of the stirrup. He insists that some hearing was maintained, because, nothwithstanding the perforation in the membrana, loud words were heard near the ear, and when the perforation was closed mechanically the patient heard whispers fifteen feet.

MOBILIZATION OF THE STAPES: OPERATIVE MEANS OF PRODUCING IT.

M. BOUCHERON has given the following outline for the indications and of methods for this operation (*Annales des Maladies de l'Oreille*, January, 1889). The indications are: 1. When the stapes begins to be ankylosed, and ordinary means for its relief impotent. 2. When labyrinthine pressure from without is persistent and compromises the vitality of the acoustic nerve.

Boucheron has performed the operation sixty times without any bad after-results, which he ascribes to strict antisepsis.

The most favorable time for the operation is the beginning of the ankylosis of the stapes, when the hearing for moderately loud speech is yet maintained at the distance of one metre, and when the harmonics of speech (stage whispers) are heard at 20 inches and 30 inches. Then mobilization of the stapes will give an audition for words, at three, four, and even five metres. (Normal hearing for similar sounds is fifteen to twenty metres.) This operation is useless when osseous ankylosis of the stapes has ensued, or when the terminations of the acoustic nerve are injured or changed by the excessive pressure upon the labyrinth-fluid.

Operative procedure. 1. Antisepsis and cocainization of the external auditory canal. 2. Myringectomy of the posterior half of the tympanic membrane. 3. Dislocation of the incus from the stapes by means of a hook. (In the simpler cases this dislocation is not done.) 4. Mobilization of the stapes in a direction to relieve its inward pressure, either by means of light traction with a small hook, or by drawing it up or down and backward and forward in the direction of the line of action of the stapedius muscle. 5. Then, tenotomy of the tensor tympani. 6. Removal of the malleus from the incus.

Since some of the diseases productive of the retraction of the stapes and the consequent otopiesis are diseases which relapse, it may happen that the labyrinth compression will return. Therefore, treatment of gout, rheumatism, syphilis, and catarrh, either infectious or from cold, if present, should follow the operation. The operation of mobilization may have to be repeated.

CHANGES IN THE INTERNAL EAR, IN HEREDITARY SYPHILIS.

BARATOUX reports his conclusions based on forty-three autopsies of subjects affected with hereditary syphilis (*Annales des Maladies de l'Oreille*, January, 1889). Nineteen of these cases were stillborn and twenty-four ranged from a few hours to four years old. Among the stillborn eight were affected in the middle ear, three in the labyrinth, eight in the middle and internal ears. In the twenty-four other cases, nineteen were affected in the tympanum, one in the internal ear, and four in both middle and internal ears. This gives twenty-seven cases of tympanic affection, four of labyrinth disease, and twelve of both middle and internal ear disease combined.

Lesions in the tympanic cavity near the labyrinth were attended by injection of the soft parts in the labyrinth. There was thickening of the membranes on a level with the cochlea, and the ampullæ of the semicircular canals, which were reddened. A sero-sanguinolent fluid bathed these parts.

PSYCHICAL DISTURBANCES INDUCED AND MAINTAINED BY AURAL DISEASES.

The attention of alienists is called to the two following considerations by DR. COZZOLINO (*Annales des Maladies de l'Oreille*, February, 1889): 1. Lesions of the ear are frequent among the insane, and very often they sustain an important part in the production of hallucinations or psychic troubles. 2. In a patient affected with auditory hallucinations the ears should always be examined, as an accurate examination will lead to a more rational therapeusis, capable of curing the case if applied in time.

AURAL AFFECTIONS IN "RAILWAY SPINE."

The nervous lesions observed in the so-called "railway spine" should be attributed, according to some observes, to an organic and not to a functional lesion. Aural lesions consequent upon railway injuries have received but little attention. There have been noted uni- or bilateral deafness, and tinnitus aurium as due to these injuries. BAGINSKY reports five cases of aural injury from railway accidents coming under his notice (*Annales des Maladies de l'Oreille*, March, 1889). He concludes that these auditory disturbances should be referred to a lesion of the auditory nervous system consequent to the railway injury. In many cases the auditory lesions do not appear immediately, which seems due to the progressive nature of the process of degeneration which goes on in the ear.

MÉNIÈRE'S VERTIGO.

Brunner, of Zurich, formulates the following conclusions regarding this disease (*Annales des Maladies de l'Oreille*, March, 1889):

1. The name Ménière's disease is no longer applicable to any special and distinct affection, but rather to a complex set of symptoms; hence the name should be changed to Ménière's vertigo.

2. Under this head there should be placed only those cases in which the attacks come on suddenly, without known cause, at distinct and prolonged intervals, without fever, preceded by a more or less intense subjective noise in the ear, and followed by a more or less rapid deafness. This definition excludes vertigo dependent upon mechanical causes in the middle ear, as well as permanent vertigo due to acute labyrinth diseases.

3. Without doubt cerebral lesions, and especially cerebellar lesions, can produce Ménière's vertigo without any positive diagnostic sign. This difficulty does not often occur, because it is rare that such lesions produce deafness, excepting in cases of pressure on the fibres of the acoustic nerve.

4. Ménière's vertigo has generally as a fundamental cause some pathological change, either primary or secondary, in the labyrinth.

5. Nosologically we must distinguish between the grave cases and the light ones, as those consecutive to otorrhœa.

6. Some of the grave ones may be connected with hemorrhages in the labyrinth; some of the light ones with a vaso-motor neurosis.

7. Generally, Brunner thinks, too important a rôle is ascribed to hemorrhage, although many cases are doubtless due to a pathological modification of the blood-pressure in the labyrinth: *an obstacle in the efferent canals of the perilymph and endolymph is an important factor in the pathogeny of this disease.*

8. In favor of the vaso-motor origin of Ménière's vertigo there may be adduced the following reasons: (*a*) The vertiginous aura preceding the attack. (*b*) Slight functional troubles show themselves only slowly. (*c*) A certain regularity in the frequency of the attacks. (*d*) The effect of quinine or even galvanization of the cervical sympathetic in moderating or arresting the attacks.

9. According to the experience of oculists, large doses of quinine provoke ischemia of the retina, and, as we all know, the labyrinth is also thus congested. We can thus explain the favorable action of this drug in cases of Ménière's vertigo.